Region 10

# Park Place Drinking Water Update - July 11, 2014

## Updates Included in this Message:

- Additional signs were posted at drinking water fountains and faucets.
- Information about EPA action levels and exposure to lead and copper.
- Schedule for the latest drinking water sampling results.
- Federal Occupational Health (FOH) blood lead and copper testing next steps.

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## We have posted signs at drinking water fountains and faucets on floors 16, 17, 20, and 21.

On Monday July 7, 2014, signs were posted at drinking water fountains and faucets on floors 16, 17, 20 and 21 in the Park Place building. We posted signs at fixtures for which we have lead results below the action level, but are awaiting copper results from our July 3 sampling. On all other EPA occupied floors, if the water exceeded the action level for lead or copper, then the drinking fountain has either been disconnected or a "do not drink" sign is posted.

Filtered drinking water is available from:

- Drinking fountains on the 20th floor, the 1st floor lobby, and in the Fitness Center.
- Refrigerator water dispensers on the 20th and 21st floors.

The filters in the new drinking water fountains use a combination of a pre-filter mesh to remove particulates, and activated carbon and ion exchange to remove contaminants, including lead and copper.

Fixtures which have been tested for lead and copper and were found to be below the action levels include:

- All kitchen sinks on floors 7, 8, 9, 10, 11, 12, 13 and 18.
- Un-posted drinking water fountains on floors 7, 8, 9, 11, 12, and 13.

Washington Holdings (the landlord) has provided bottled water

dispensers on the 10th and 18th floors because water fountains on these floors exceeded the action level for lead and/or copper. Washington Holdings has also agreed to provide bottled water dispensers for the 16th, 17th, and 21st floors while we are waiting for copper results from the laboratory. The water dispensers should be placed on those floors within the next several days. Lead testing has already been conducted on the floors 16, 17 and 21 and lead levels were below the action level.

We are awaiting sampling results for lead and copper on all hot water dispensers so please **do not drink water from the hot water dispensers** until further notice.

## Information on Lead

The Safe Drinking Water Act requires EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur with an adequate margin of safety. These non-enforceable health goals, based solely on health risks are called maximum contaminant level goals (MCLGs). The MCLG for lead is zero. EPA has set this level based on the best available science which shows there is no safe level of exposure to lead. The National Primary Drinking Water Regulations' action level of 15 µg/L for lead is not a health-based standard, but rather a technology based standard that triggers certain follow-up activities for public water systems.

## Information on Copper

Copper is an essential nutrient which is regulated by the body for most individuals. However, exposure to copper can cause short-term gastro-intestinal distress and long-term liver and kidney disease. The EPA MCLG (and action level) for copper is 1,300 µg/L. Copper toxicity is extremely rare for people who do not suffer from Wilson disease. The Institute of Medicine, the health arm of the National Academy of Sciences, has established a **Tolerable Upper Intake Level,** for copper of 10,000 µg/day (Institute of Medicine 2001). This level is safe for adults, including pregnant women and nursing mothers, and is defined as:

***"The highest level of daily nutrient intake that is likely to pose no risk of adverse health effects for almost all individuals."***

People with Wilson disease, a congenital impairment of copper metabolism, are especially susceptible to copper toxicity and account for the exception to "almost all individuals".

Based on the information from the Institute of Medicine, EPA Region 10 toxicologists believe that the likelihood of adverse health effects from copper from drinking water in the Park Place building is low because:

- The safe level for copper is 10,000 µg/day.

- A person in the upper 95$^{th}$ percentile (those with the highest copper intake) of the United States has a copper intake of 4,240 µg/day from other sources (drinking water, diet, and supplements) see Appendix Table C-16 from (Institute of Medicine 2001).

- Even at this upper 95$^{th}$ percentile level, a person could consume an additional 5,760 µg/day (10,000 µg/day – 4,240 µg/day = 5,760 µg/day) and remain at the safe level of 10,000 µg/day.

- The highest copper concentration detected in the Park Place building to date (the first draw sample collected from the 13$^{th}$ floor north drinking fountain) was 5,130 µg/L. Because the highest concentration was the first draw sample, it is unlikely that you could draw a liter of water at this concentration. The copper concentration in the second draw from this fountain was 3,260 µg/L.

- At the highest copper concentration detected, you could drink 1.1 liters per day and not exceed the safe level 10,000 µg/day.

## Schedule for latest drinking water sampling results.

EPA sampling teams completed additional sampling on July 3, 2014. Locations sampled included:

- Refrigerators, sinks and/or drinking fountains on floors 5, 16, 17, 20, 21, the Fitness Center, PERC, and the 1$^{st}$ floor lobby.

- Hot water dispensers on floors 5, 7, 8, 9, 10, 11, 12, 13 and 18.

Laboratory results will be available in approximately two weeks. We will include a summary of the results in a future email update and post the laboratory results on the InfoPage as soon as they are available.

## FOH blood lead and copper testing next steps:

Many employees have signed up to have their blood lead and copper

levels tested at Federal Occupational Health (FOH) Services. FOH has indicated that it will take up to about ten days for employees to receive their test results. When employees have received their results, we plan to invite a health professional to the Seattle office to provide information and answer questions. If you would like to have your blood tested or have any questions please contact Grady Maxwell at 206-553-0241 or Maxwell.grady@epa.gov or Mark Filippini at 206-553-6327 or Filippini.mark@epa.gov.

**References:**

Institute of Medicine (2001). Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc. Washington, DC, Standing Committee on the Scientific Evaluation of Dietary Reference Intakes, Panel on Micronutrients, Food and Nutrition Board, Institute of Medicine**:** xxii 800.

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